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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Brown, et al.

Serial No.: 09/847,479

Group Art Unit: 1756

Filed: May 2, 2001

Examiner: Barreca, N.

For: GATE LINEWIDTH TAILORING AND CRITICAL DIMENSION CONTROL FOR
SUB-100 NM DEVICES USING PLASMA ETCHING

Honorable Commissioner of Patents
Alexandria, Virginia 22313-1450

STATEMENT OF SUBSTANCE OF INTERVIEW

Sir:

In response to the requirement that a statement of the substance of an interview be placed in the record, Applicants hereby submit the following.

Applicants gratefully acknowledge Examiner Barreca for taking time from her busy schedule to conduct a personal interview on February 25, 2004, for the above-referenced Application. The interview was courteous and professional, and it is believed by Applicants' representative that prosecution has been advanced because of this interview.

Concerning the substance of the interview, Applicants' representative presented a summary of the present invention as providing a method to reach below the 100 nm critical dimension in chip designs.

A key ingredient for this ability is the present inventors' discovery that RF setting can be used as a tunable parameter to correct Across Chip Line Variation (ACLV) by providing an adjustment to selectively correct variations in line-widths between isolated features and nested features.

Applicants' representative explained that, although the description in Ng might reasonably be described as including a parameter (e.g., O_2) that compensates variations between the isolated/nested features, there is no indication that variation control is controllable by "tuning" this parameter. In contrast, as explained at lines 16-17 of page 11, the present invention includes the capability to tune the RF setting so as to adjust the relative impact of the etch for the isolated features versus the nested features.

The Examiner seemed to agree that the O_2 -based etch in Ng might not reasonably qualify as a "tunable" parameter and indicated that she would consider this aspect of the terminology in her evaluation of the Amendment filed on December 29, 2003.

The Examiner also indicated her agreement that, by reason of common assignment to IBM between Ng and the present invention, the 103 rejection based on Ng would be withdrawn.

2/25/04


Frederick E. Cooperrider (Reg. No. 36, 769)